



Grist for the Mill

Sharing Ideas among Alaskan Interpreters

Doug Knapp on the Effectiveness of NPS Interpretation



Doug Knapp visited Denali NP&P in July 2004.

In 2001, Doug Knapp, Ph.D. was subcontracted to research the effectiveness of interpretation in the National Park Service. With 10 years experience in interpretation and 29 years in education, Doug was a natural for the job. Doug has since observed 36 interpreters in five major parks in the Lower 48. After Blanca Stransky requested his expertise here in Alaska, Doug added Denali National Park & Preserve to his list of parks last month. Blanca arranged a teleconference on 7/13 for NPS interpreters and educators statewide to share some of the highlights of his research.

Education Programs That REALLY Work

In 2001, Doug made a year-long qualitative analysis of children's education programs, identifying some of the program elements "that really worked." Doug attended and transcribed the initial education programs; a year later he talked to the fifth-graders who attended. At the Smokies, all twelve students remembered an activity that involved sucking on a defective straw to simulate how woolly Adelgids extract sap from the base of hemlock trees, killing entire stands in the park. Not only did the children remember the activity, but they remembered the name of the bug. At another program in Yellowstone, students remembered wildlife concepts integrated into a camouflage game, once again a full year after the activity. Another study verified students remembered the concepts in the *Project Wild* game Migration Headache (demonstrating the obstacles birds encounter in migrating) even THREE years after playing it. Doug was quick to note that the games could have taken place anywhere. Retention was connected to playing the game, irrespective of setting.

In George Washington Carver NM in Missouri, students were exposed to a variety of educational techniques over a period of four hours. The park offers a 1/2 mile trail, a tour of the Carver house, a film, and even an interactive science museum. Interviews a year later revealed the students remembered the novelty of the tiny house where Carver grew up and an activity in which the group made "peanut milk." Most students DID NOT remember the "bells and whistles" of the science museum. Lesson to be learned: Optimize the novel "hook" of the site (the tiny house) and monopolize on hands-on activities with rangers. Evidently, staff (people interaction) is more than important than structure (buildings and museum paraphernalia).



More about Doug Knapp:

Doug Knapp is currently an Associate Professor in Recreation and Park Administration at Indiana University, Bloomington. Other positions include Director, Hilltop Garden and Nature Center (Indiana University), Science Education Instructor at Southern Illinois University, and Director, University of Rhode Island Environmental Education Center.

Doug received his B.S. from Miami University, Ohio, his M.S. degree from Northern Illinois University, and his Ph.D. from Southern Illinois University.

He received Indiana University's Teaching Excellence Recognition Award in 1997 and 1998, was voted Best Professor by the *Bloomington Voice Newspaper* in 1997, and received the U.S. Forest Service Wilderness Education Excellence Award in 1994.

Doug is a member of the National Association of Interpretation, the North American Association of Environmental Education, and the National Recreation and Park Association.

Doug's research interests include environmental education and interpretation, ecology, and global environmental issues.

So much for kids.. What about adults?

Several years ago, Doug researched an ADULT slide program on white tail deer at a Brown County State Park site. After interviewing them 1 1/2 years later, the adults did not remember the general content of the program, but they DID remember their kids enjoying a hands-on table of antlers and fur at the front of the room. The adults' conduit of memory was through their kids. Are adults just big kids?

Theoretically, interpreters know what elements are important for an effective program: good themes and organization, an innovative style and subject, and, most of all, connecting and relating to the public. But what exactly IS going on in parks?

Regardless of training to the contrary, many rangers resort to lecture style, didactic programs. It's not a matter of training or whether interpreters are seasonal or permanent. Other than "Where are you from?" at the start, it's a one-way street to the finish. Few rangers stop in the middle of the program and query their audience. In addition, rangers exhibit particularly poor on-site marketing (announcing and inviting visitors to programs).

"What we as interpreters say we should be doing, we are not doing," Doug emphasized. Where is the disconnect? Doug attributes interpretation via a didactic style as being "easy and safe." Often it is a style people are most comfortable with, maybe from years in the educational system. The Interpretive Development Program recognizes that it is important to promote two-way communication in order to connect with the visitor. Interpreters need to query their audiences for responses and reactions before, during, and after programs.

Connecting with the IDP

This spring Doug Knapp began research into the effectiveness of the Interpretive Development Program, comparing certified programs with uncertified programs. Doug's study involved evaluating a 2-hour boat tour through the mill area of Lowell NHS and a 2-hour tram ride at Yosemite NP.

The Lowell canal tour involved audiences from the area, most of whom already felt a strong connection to the region. The program was quite didactic and involved very little interaction with attendees. Nevertheless, the visitors remembered the program almost word for word. The tour involved traveling through the locks while the interpreter told the story of how the area was saved from flooding. The combination of a dramatic setting and a message in the form of a story created a very strong memory trace. On the other hand, the Yosemite program involved visitors from all over the country, with little connections to the area. Still, the recall was rich. Knapp is still reviewing the results.

Interpreters want to know....

Story-telling seems particularly effective, but do interpreters, scientists, and researchers see this technique as too "warm and fuzzy?" Does a more scientific presentation lend more credence to a program?

Many programs involve amphitheaters or large audiences which do not lend themselves to two-way communication. Studies show audiences remember only portions of these programs. The solution: Learn techniques for larger audiences. Lessen the content (humans only retain five or so pieces of information at one time). Leave some of your academic background behind. Use what works.



Doug Knapp and Mike Giannachini take a break at DENA.

Is there any more success with historical/cultural presentations than with natural history presentations?

Doug will try to research another historical park to try to find out. Hawaii and the Everglades were next in line.

Attention spans are getting shorter. We're competing with the web and the Discovery Channel. There's an expectation for fun. What sets Park Service programs apart?

Person-to-person, face-to-face interaction. Positive and enthusiastic interpreters are a unique tool for interfacing with the visitor. Two-way communication and dialogue, not traditional and out-of-date slide shows, are the secret to success. Emphasize people skills and interaction with the audience. Lessen content and improve delivery. Instead of presenting a program on 5-6 animal species in the park, focus on one species and include more audience participation.

What about cultural components and gender?

Researchers from the School of Education at Indiana University are presently looking at those variables.

Wrangell-St. Elias 2004 Research Project

Lois Dalle-Molle, CESU in Fairbanks, indicated a Ph.D. student with the University of Alaska, Fairbanks is presently conducting research on "front-loading," providing information to visitors prior to visiting Wrangell-St. Elias NP&P. Doug also verified the benefit of knowing the demographics of visitors before they arrive, a definite possibility with clientele aboard cruise ships. But he emphasized that the results MUST be integrated into programs. Have an Elderhostel that's mostly tired? Design a program with less content and more fun to keep their interest.

Other References for Research by Doug Knapp:

NAI Legacy Magazine - November 2003 Issue
Journal of Interpretation Research - www.interpnet.com/JIR
Research in Science Education - www.kluweronline.com
Environmental Education Research - www.tandf.co.uk

The teleconference was recorded on a standard cassette. Contact Joanne Welch at 271-2741 or by email if you are interested in borrowing the tape.